

MILITARY SPECIFICATION SHEET

BOLT, STRAIGHT SHANK, EXPANDABLE ALUMINUM  
ALLOY SLEEVE, ALLOY STEEL PIN, RELIABILITY  
AND MAINTAINABILITY REQUIREMENTS FOR

This specification is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the bolt described herein shall consist of this specification sheet and the latest issue of MIL-B-8831.

1. The expandable sleeve bolt may be used in bolted connections that require a precision controlled clearance fit or controlled interference fit.
2. The bolt may be used in design, repair and modification. The bolt may be used for the replacement of MS21134, MS21250, NAS 624 through NAS 644 bolts and tapered or straight shank interference fit fatigue rated fasteners.
3. The bolt shall be modified only by the original bolt manufacturer.
4. The bolt shall be used with nuts in accordance with MIL-N-8922/1 and MIL-N-8985/3 and wrenching elements in accordance with MS33787.
5. For installation of protruding head bolts, preload shall be induced by "wrenching" the nut. The bolt head "wrenching element" is intended to be used to prevent rotation of the bolt shank.
6. The bolt shall not be used in joints that are routinely disassembled.
7. The bolt shall not be used if the pin and sleeve have been separated.
8. MIL-B-8831/2 and /3 bolts are intended for use in applications requiring high interference levels. They shall not be used where high interference residual tensile stresses may cause stress corrosion cracking, especially in the 7000 series aluminum tempers.
9. MIL-B-8831/4 and /5 bolts are intended for use in fatigue critical areas where controlled low interference levels are required due to material susceptibility to stress corrosion cracking.

FSC 5306

Custodians:

Army - AV

Navy - AS

Air Force - 11

Preparing activity:

Navy - AS

(Project no. 5306-0742)

# STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

**INSTRUCTIONS** This form is provided to solicit beneficial comments which may improve this document and enhance its use. DoD contractors, government activities, manufacturers, vendors, or other prospective users of the document are invited to submit comments to the government. Fold on lines on reverse side, staple in corner, and send to preparing activity. Attach any pertinent data which may be of use in improving this document. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity. A response will be provided to the submitter, when name and address is provided, within 30 days indicating that the 1426 was received and when any appropriate action on it will be completed.

**NOTE** This form shall not be used to submit requests for waivers, deviations or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

DOCUMENT IDENTIFIER (Number) AND TITLE  
 MIL-B-88317I Bolt, Straight Shank, Expandable Aluminum Alloy  
 Sleeve Alloy Steel Pin Reliability and Maintainability Reqmnts

NAME OF ORGANIZATION AND ADDRESS OF SUBMITTER

☐ VENDOR ☐ USER ☐ MANUFACTURER

1 ☐ HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE? ☐ IS ANY PART OF IT TOO RIGID RESTRICTIVE LOOSE OR AMBIGUOUS? PLEASE EXPLAIN BELOW

A. GIVE PARAGRAPH NUMBER AND WORDING

B. RECOMMENDED WORDING CHANGE

C. REASON FOR RECOMMENDED CHANGE(S)

2 REMARKS

SUBMITTED BY (Printed or typed name and address - Optional)

TELEPHONE NO

DATE

DD FORM 1426  
 1 OCT 76

EDITION OF 1 JAN 72 WILL BE USED UNTIL EXHAUSTED

FOLD

DEPARTMENT OF THE NAVY

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300



NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

**BUSINESS REPLY MAIL**

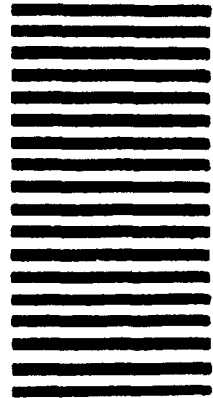
FIRST CLASS

PERMIT NO 12503

WASHINGTON D C

POSTAGE WILL BE PAID BY THE DEPARTMENT OF THE NAVY

Engineering Specifications and Standards Department (Code 93)  
Naval Air Engineering Center  
Lakehurst, NJ 08733



FOLD